

ARTICLE TEN

FLOOD PLAIN MANAGEMENT

10.00.00 **PURPOSE:** Inasmuch as the flood hazard areas of Santa Rosa County are subject to periodic inundation which can result in loss of life, property, health, and safety, and which can disrupt commerce and governmental services and which can cause extraordinary public expenditures for flood protection and relief and which can impair the tax base of the County and otherwise adversely affect the public health, safety and general welfare and because these flood losses are caused by the cumulative effect of obstruction in flood plains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed or otherwise protected from flood damages, this article is designed to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas. Towards this end the provisions of this article are designed to:

- A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural flood plains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood water or which may increase flood hazards to other lands.

10.00.01 **Objectives:** The objectives of this article are:

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;
- F. To help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas; and
- G. To insure that potential home buyers are notified that property is in a flood area.

10.01.00 GENERAL PROVISIONS

10.01.01 Lands to Which this Article Applies: This article shall apply to all areas of special flood hazard within the jurisdiction of Santa Rosa County, except areas of Santa Rosa County under the jurisdiction of other governmental agencies having independently qualified under the permanent Federal Flood Insurance Program.

10.01.02 Basis for Establishing the Areas of Special Flood Hazard: The areas of special flood hazard identified by the Federal Emergency Management Agency in its Flood Insurance study for the unincorporated areas of Santa Rosa County initializing August 8, 1979, with accompanying maps and other supporting data, and any revision thereto are adopted by reference and declared to be a part of this ordinance.

10.01.03 Establishment of Development Permit: A Development Permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities, within any areas of special flood hazard.

10.01.04 Compliance: No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this article and other applicable regulations including this Code.

10.01.05 Abrogation and Greater Restrictions: This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

10.01.06 Interpretation: In the interpretation and application of this article, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

10.01.07 Warning and Disclaimer of Liability: The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of Santa Rosa County or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

10.02.00 ADMINISTRATION

10.02.01 Designation of County Building Official: The County Building Official, or his successor, is hereby appointed to administer and implement the provisions of this article, with enforcement responsibility delegated pursuant to the County Table of Administrative Organization.

10.02.02 Permit Procedures: Application for a Development Permit shall be made to the County Building Official on forms furnished by him, prior to any development activities, and may include, but not be limited to, the following plan requirements, in duplicate; drawn to scale; showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials; drainage facilities, and the location of each of the foregoing more specifically, the following information is required in addition to any other information required by other provisions of this ordinance:

- A. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures.
- B. Elevation with respect to Foundation Structure referenced to mean sea level to which any non-residential structure will be flood-proofed.
- C. Provide a certificate from a registered professional engineer or architect that the non-residential flood-proofed structure meets the flood-proofing criteria in Section 10.03.02 (B).

- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- E. Provide a floor elevation or flood-proofing certification after the lowest floor is completed, or in instances where the structure is subject to the regulations applicable to Coastal High Hazard Areas, after placement of the horizontal structural members of the lowest floor. Within twenty-one (21) calendar days of establishment of the lowest floor elevation, or flood-proofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the County Building Official a certification of the elevation of the lowest floor, flood-proofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood-proofing is utilized for a particular building, said certification shall be prepared by and certified under the direct supervision of a professional engineer or architect. Any work done within the twenty-one (21) day calendar period and prior to submission of the certification shall be at the permit holder's risk. The County Building Official shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

10.02.03 Duties and Responsibilities of the County Building Official: Under this article, duties of the County Building Official shall include, but not be limited to:

- A. Review of all development permits to assure that the permit requirements of this article have been satisfied.
- B. Advise permittee that additional federal or state permits may be required, and if specific federal or state permits are known, require that copies of such permits be provided and maintained on file with the development permit.
- C. Notify adjacent communities and the Department of Community Affairs, Division of Resource Planning and Management, State of Florida, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

- D. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- E. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with Section 10.02.02 (E).
- F. Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, in accordance with Section 10.02.02 (E).
- G. In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity water and hurricane wave wash.
- H. In Coastal High Hazard Areas, the County Building Official shall review plans for adequacy of breakaway walls in accordance with Section 10.03.02 (E) (5).
- I. When flood-proofing is utilized for a particular structure, the County Building Official shall require certification from a registered professional engineer or architect.
- J. Where interruption is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the County Building Official shall make the necessary interpretation with the assistance of the County Engineer. A contestant shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- K. When base flood elevation data have not been provided in accordance with Section 10.02.02 then the County Building Official shall obtain, review, and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of Section 10.03.00 et. seq.
- L. All records pertaining to the provisions of this article shall be maintained in the office of the County Building Official and shall be open for public inspection.

10.02.04 Variance Procedures

- A. The Board of County Commissioners shall hear and decide appeals and request for variances from the requirements of this article.
- B. The Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the County Building Official in the enforcement or administration of this article.
- C. Any person aggrieved by the decision of the Board or any taxpayer may appeal such decision to the Circuit Court, as provided in the Florida Statutes.
- D. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section.
- E. In passing upon such applications, the Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:
 - 1. The danger that materials may be swept onto other lands to the injury of others;
 - 2. The danger of life and property due to flooding or erosion damage;
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - 4. The importance of the services provided by the proposed facility to the community;
 - 5. The necessity to the facility of a waterfront location, where applicable;
 - 6. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - 7. The compatibility of the propose use with existing and anticipated development;
 - 8. The relationship of the proposed use to the Comprehensive Plan and flood plain management program for that area;

9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action if applicable, expected at the site;
 11. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, streets, and bridges;
 12. The potential for and degree of environmental damage as a result of flooding; and
 13. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1) through (11) have been fully considered. As the lot size increase beyond the one-half acre, the technical justification required for issuing the variance increases.
- F. Upon consideration of the factors listed above and the purposes of this article, the Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- G. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- H. Conditions for variances:
1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 2. Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

- c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- 3. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- 4. The County Building Official shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

10.03.00 PROVISIONS OF FLOOD HAZARD REDUCTION

10.03.01 General Standards: In all areas of special flood hazard, the following provisions are required:

- A. New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- B. Mobile homes to be placed or substantially improved on sites in an existing mobile home park or subdivision within Zones A1-30, AH, and AE on Santa Rosa County's FIRM shall be elevated so that the mobile home chassis is supported on reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over the top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.
- C. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- D. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- E. Recreational vehicles placed on sites within Zones A1-30, AH, and AE on Santa Rosa County's FIRM must either be on the site fewer than 180 consecutive days, be fully licensed and ready for highway use or meet the permit requirements of mobile homes.

- F. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- G. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- H. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- I. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- J. Any alteration, repair, reconstruction or improvements to a structure which is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article.
- K. Structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids, or other hazardous or toxic materials shall be located outside of flood prone or flood plain areas to the extent possible and feasible. If these facilities cannot be located outside flood prone or flood plain areas, the design and construction of such facilities shall be flood proofed in accordance with the following standards:
 - 1. A registered professional engineer shall certify that the building has been designed and constructed so that the structure and attendant facilities are watertight and capable of resisting the effects of the regulatory flood below protection elevation established in the ordinance.
 - 2. The design must take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effect of buoyancy, and impacts from debris.
- L. Limit the alteration of natural flood plains, stream channels, and natural protection barriers which are involved in the accommodation of flood waters. This includes restrictions or prohibitions on unnecessary or incompatible filling, grading, dredging, drainage, and other development which will result in a damaging increase in erosion, habitat, destruction, or adverse impacts on the water quality treatment function of the flood plain.
- M. New solid waste disposal sites within flood prone and flood plain areas are prohibited.

- N. Adequate buffers to reduce any adverse impact from forestry activities are required.

10.03.02 Specific Standards: In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Sections 10.02.02 or 10.03.03, the following provisions are required:

- A. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated equal to or above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Section 10.03.02 (C) below.
- B. Non-Residential Construction: New construction or substantial improvement of any commercial, industrial, or non-residential structure shall have the lowest floor, including basement, elevated equal to or above the level of the base flood elevation. Structures located in all A-zones may be flood proofed in lieu of being elevated provided that all areas of the structure below the required elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Official as set forth in subpart (C) below.
- C. Elevated Buildings: New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the based flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - 1. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - a. Provide a minimum of two openings having a total net area of not less than one square foot of enclosed area subject to flooding;
 - b. The bottom of all openings shall be no higher than one foot above grade; and
 - c. Openings may be equipped with screens, louvers, valves, or other

coverings or devices provided they permit the automatic flow of floodwaters in both directions.

2. Electrical, plumbing and other utility connections are prohibited below the base flood elevation;
3. Access to the enclosed areas shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
4. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

D. Floodways: Located within areas of special flood hazard established in Section 10.01.01, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following shall apply:

1. Prohibit encroachments, including fill, new construction substantial improvements and other development unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;
2. If the provisions in subpart (A) above are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article;
3. Prohibit the placement of manufactured homes (mobile homes), except in existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and elevation standards of this article are met.

E. Coastal High Hazard Area (V Zones): Located within the areas of special flood hazard established in Section 10.01.02 are areas designated as Coastal High Hazard Areas. These areas have special flood hazards associated with wave wash, therefore, the following provisions shall apply:

1. All buildings or structures shall be located ten (10) feet landward of the reach of the mean high tide or as otherwise required by this ordinance.
2. All buildings or structures shall be elevated so that the lowest horizontal member (excluding pilings or columns) is located no lower than the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action. Walls may be permitted and must be designed to wash away in the event of abnormal wave action and in accordance with subpart (8) below.
3. All buildings or structures shall be securely anchored on pilings or columns;
4. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100 year mean recurrence interval (one percent annual chance flood).
5. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions of this section and subparts (2), (3) and (4) above.
6. There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the building free to obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The Building Official shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
 - a. Particle composition to fill material does not have a tendency for excessive natural compaction;
 - b. Volume and distribution of fill will not cause wave deflection to

adjacent properties; and

- c. Slope to fill will not cause wave run-up or ramping.
- 7. There shall be no alteration of sand dunes which would increase potential flood damage;
- 8. Non-supporting breakaway walls, open lattice work or mesh screening shall be allowed below the base flood elevation provided they are not part of the structural support of the building and are designed so as to breakaway under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:
 - a. Design safe loading resistance of each wall shall be not less than 10 nor more than 20 pounds per square foot; or
- 9. If aesthetic lattice work or screening is utilized, such enclosed space shall not be designed to be usable for human habitation, but shall be designed to be usable only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
- 10. Prior to construction, plans for any structure that will have lattice work or decorative screening must be submitted to the Building Official.
- 11. Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except with lattice work or decorative screening, as provided for in subparts (8) and (9) above.
- 12. Prohibit the placement of manufactured home (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and elevation standards of this article are met.

10.03.03 Standards for Subdivision Proposals

- A. All subdivision proposals shall be consistent with the need to minimize flood damage;

- B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- D. Base flood elevation data shall be provided for subdivision proposals and other proposed development which is greater than the lesser of fifty lots or five acres.

10.03.04 Standards for Areas of Shallow Flooding (AO Zones): Located within the areas of special flood hazard established in Section 10.01.01, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- A. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet above the highest adjacent grade.
- B. All new construction and substantial improvement of existing non-residential structures shall:
 - 1. Have the lowest floor, including basement, elevated to the base flood level specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including abasement, shall be elevated at least two (2) feet above the highest adjacent grade; or
 - 2. Together with attendant utility and sanitary facilities be completely flood-proofed to or above that level so that any space below that level is watertight with wall substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects